

### ABSTRACT

The present invention provides a peritoneal dialysis solution that contains heat stable osmotic agents such as D-glucitols, gluconic acids and alkylglycosides produced the reduction, oxidation or glycosylation of icodextrins respectively. As a result, osmotic agents that are stable under autoclaving or heat sterilization conditions are provided which reduces the amount of bioincompatible materials in the sterilized peritoneal dialysis solutions. Methods of preparing the D-glucitols, gluconic acids and alkylglycosides are disclosed.